

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 0151268	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/JP01/05525	International filing date (day/month/year) 27 June 2001 (27.06.01)	Priority date (day/month/year)
International Patent Classification (IPC) or national classification and IPC G09C 1/00		
Applicant <b>FUJITSU LIMITED</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 19 October 2001 (19.10.01)	Date of completion of this report 04 April 2002 (04.04.2002)
Name and mailing address of the IPEA/JP Facsimile No.	Authorized officer Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

 the international application as originally filed the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the claims:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, as amended (together with any statement under Article 19)

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the drawings:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4.  The amendments have resulted in the cancellation of: the description, pages \_\_\_\_\_ the claims, Nos. \_\_\_\_\_ the drawings, sheets/fig \_\_\_\_\_5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

the entire international application.  
 claims Nos. 19-28

because:

the said international application, or the said claims Nos. 19-28  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

The subject matters of claims 19-28 are programs to be executed by computers, and do not use any hardware resource during the execution. Therefore, since they merely describe an idea expressing a program source, they relate to a mere presentation of information, which does not require an international preliminary examination by the International Preliminary Examining Authority in accordance with PCT Article 34(4)(a)(i) and Rule 67.1(v).

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

no international search report has been established for said claims Nos. \_\_\_\_\_

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

the written form has not been furnished or does not comply with the standard.  
 the computer readable form has not been furnished or does not comply with the standard.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP01/05525

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-18, 29-38	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-18, 29-38	NO
Industrial applicability (IA)	Claims	1-18, 29-38	YES
	Claims		NO

**2. Citations and explanations****Claims 1-12 and 29-35**

Document 1: JP, 10-247949, A (Nippon Telegraph and Telephone Corp.), 14 September, 1998 (14.09.98), page 3, column 3, lines 26-32, page 5, column 7, lines 25-42, page 5, column 8, lines 27-48, page 5, column 8, lines 42-48, Figs. 1-12

describes an information processing method, in which (1) an electronic mail and the signature of the sender for the said electronic mail are received from a computer terminal, (2) in the case where the signature has been successfully authenticated, the said electronic mail is converted in a medium that is suitable for the receiver, (3) facsimile image data containing a sending address is produced, and (4) the said facsimile image data is transmitted.

Document 2: JP, 2000-338868, A (NTT Data Corp.), 8 December, 2000 (08.12.00), page 4, column 5, lines 2-37, page 4, column 6, line 39 to page 5, column 7, line 28, page 7, column 12, line 11 to page 8, column 14, line 21, Figs. 1-8

describes a technique, in which signature data is produced for use as a signature covering the basic information converted into another format, to allow authentication also after conversion into the other format.

Document 3: JP, 2000-232442, A (NTT Data Corp.), 22 August, 2000 (22.08.00), page 3, column 4, lines 37-43, page 4, column 5, lines 7-30, Figs. 1-5

describes a technique, in which an authentication program necessary for signature authentication is also distributed to authentication devices.

It is considered to be obvious for a person skilled in the art, to employ the technique of converting also the format of signature data described in document 2, in the information processing method described in document 1, to allow the signature data to be authenticated also on the receiver side after format conversion, in order to avoid the possible inconvenience caused to a data sender or receiver by a falsified message. It is also considered to be obvious for a person skilled in the art as described in document 3, to distribute the program necessary for signature authentication. Furthermore, it is considered to be obvious for a person skilled in the art, to implement an information processing method as a computer system.

**Claims 13-18 and 36-38**

Document 4: "Introduction to Theory of Cryptography (in Japanese)," (Eiji Okamoto), 25 February, 1993 (25.02.93), Kyoritsu Shuppan K.K., Initial Edition, First Impression, pages 129-131

describes a method of checking an identifier prepared by using a hash function, for authentication, as a technique for confirming the authenticity of a message.

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No.

PCTJP01/05525

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of : V.2

It is considered to be obvious for a person skilled in the art, to employ the technique of converting also the format of signature data described in document 2, in the information processing method described in document 1, to allow the signature data to be authenticated also on the receiver side after format conversion, in order to avoid the possible inconvenience caused to a data sender or receiver by a falsified message. Furthermore, it is a well-known commonly used technique described in document 3, to distribute the program necessary for signature authentication, and it is also a well-known commonly used technique described in document 4, to use a method of checking an identifier prepared by using a hash function, as a method of realizing signature authentication. So, employing these techniques is considered to be obvious to a person skilled in the art. Moreover, it is considered to be obvious for a person skilled in the art, to implement an information processing method as a computer system.